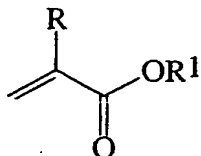


Patent Claims

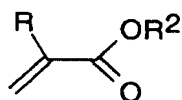
1. Polymer dispersion having high stability,
comprising
 - A) at least one dispersed polyolefin,
 - B) at least one dispersing component,
 - C) mineral oil and
 - D) at least one compound comprising
(oligo)oxyalkyl groups.
2. Polymer dispersion according to Claim 1,
characterized in that the component B) represents
a copolymer which comprises one or more blocks A
and one or more blocks X, the block A representing
olefin copolymer sequences, hydrogenated
polyisoprene sequences, hydrogenated copolymers of
butadiene/isoprene or hydrogenated copolymers of
butadiene/isoprene and styrene, and the block X
representing polyacrylate-, polymethacrylate-,
styrene-, α -methylstyrene [sic] or N-vinyl-
heterocyclic sequences and/or sequences of
mixtures of polyacrylate-, polymethacrylate-,
styrene-, α -methylstyrene [sic] or N-vinyl-
heterocycles.
3. Polymer dispersion according to Claim 1 or 2,
characterized in that the component B) is
obtainable by graft copolymerization of a monomer
composition comprising (meth)acrylates and/or
styrene compounds onto polyolefins according to
component A).
4. Polymer dispersion according to Claim 3,
characterized in that a monomer composition is
used, comprising one or more (meth)acrylates of
the formula (I)



(I),

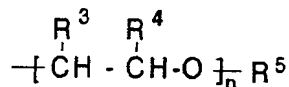
in which R denotes hydrogen or methyl and R¹ denotes hydrogen or a linear or branched alkyl radical having 1 to 40 carbon atoms,

and/or one or more (meth)acrylates of the formula (II)



(II),

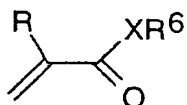
in which R denotes hydrogen or methyl and R² denotes an alkyl radical substituted by an OH group having 2 to 20 carbon atoms or denotes an alkoxyated radical of the formula (III)



(III),

in which R³ and R⁴ independently represent hydrogen or methyl, R⁵ represents hydrogen or an alkyl radical having 1 to 40 carbon atoms and n represents an integer from 1 to 90,

and/or one or more (meth)acrylates of the formula (IV)



(IV),

in which R denotes hydrogen or methyl, X denotes oxygen or an amino group of the formula -NH- or -Nr⁷-, in which R⁷ represents an alkyl radical having 1 to 40 carbon atoms, and R⁶ denotes a linear or branched alkyl radical substituted by at

least one $\text{-NR}^8\text{R}^9$ group and having 2 to 20, preferably 2 to 6, carbon atoms, R^8 and R^9 , independently of one another, representing hydrogen, an alkyl radical having from 1 to 20, preferably from 1 to 6 [lacuna] or in which R^8 and R^9 , including the nitrogen atom and optionally a further nitrogen or oxygen atom, form a 5- or 6-membered ring which may optionally be substituted by $\text{C}_1\text{-C}_6\text{-alkyl}$.

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5. Polymer dispersion according to Claim 2, 3 or 4, characterized in that a monomer composition which comprises dispersing monomers is used in the grafting reaction.

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6. Polymer dispersion according to any of Claims 2 to 5, characterized in that the weight ratio of the blocks A to the blocks X is in the range from 20:1 to 1:20.

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7. Polymer dispersion according to one or more of the preceding claims, characterized in that the component A) comprises one or more olefin copolymers.

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8. Polymer dispersion according to one or more of the preceding claims, characterized in that the component D) comprises at least one ethoxylated alcohol.

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9. Polymer dispersion according to Claim 8, characterized in that the ethoxylated alcohol comprises from 2 to 8 ethoxy groups, the hydrophobic radical of the alcohol comprising from 4 to 22 carbon atoms.

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10. Polymer dispersion according to one or more of the preceding claims, characterized in that the

polymer dispersion comprises from 2 to 40% by weight of component C).

- 5 11. Polymer dispersion according to one or more of the preceding claims, characterized in that the weight ratio of component C) to component D) is in the range from 2:1 to 1:25.
- 10 12. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises at least 20% by weight of the component A).
- 15 13. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises from 2 to 40% by weight of the components D).
- 20 14. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises a compound which has a dielectric constant greater than or equal to 9.
- 25 15. Polymer dispersion according to Claim 14, characterized in that the compound having a dielectric constant greater than or equal to 9 is selected from water, ethylene glycol, polyethylene glycol and/or alcohol.
- 30 16. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises up to 30% by weight of component B).
- 35 17. Process for the preparation of polymer dispersions according to any of Claims 1 to 16, characterized in that the component A) is dispersed in a solution of components B) with application of

shear forces at a temperature in the range from 80 to 180°C.

- 5 18. Use of a polymer dispersion according to any of Claims 1 to 16 as an additive for lubricating oil formulations.